



## COMMONWEALTH of VIRGINIA

### DEPARTMENT OF ENVIRONMENTAL QUALITY

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Douglas W. Domenech  
Secretary of Natural Resources

David K. Paylor  
Director

(804) 698-4000  
1-800-592-5482

August 24, 2010

Mr. Ronald L. Rice  
Capital Outlay Program Manager  
Department of State Police  
P.O. Box 27472  
Richmond, VA 23261-7472

Dear Mr. Rice:

Pursuant to Virginia Code Section 10.1-1189 *et seq.*, the Department of Environmental Quality (DEQ) has completed its review of the environmental impact report concerning the Virginia State Law Enforcement Training Facility in Powhatan County (Agency Code: 156, Project Code: 17805, DEQ 10-017S). The Department's comments on this project are attached for your guidance. These comments are being reviewed by the Secretary of Administration on behalf of the Governor. The project must be approved by the Secretary of Administration, following her review of these comments, before it may be carried out.

Thank you for the opportunity to review this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Julia Wellman", with a long, sweeping horizontal line extending to the right.

Julia Wellman

Environmental Impact Review Coordinator

#### Enclosures

cc: Honorable Lisa Hicks-Thomas  
Jonathan D. Howe, DPB  
W. Michael Coppa, DEB  
Lewis R. McCabe, DOA  
Carolyn Bishop, Powhatan County

Mr. Ronald Rice  
Law Enforcement Training Facility  
10-017S

Carson Tucker, Powhatan County, Member, Board of Supervisor  
Robert A. Crum, Richmond Regional PDC  
Roger Kirchen, DHR

ec: Rick Weeks, DEQ  
Ronnie Rice, DSP  
Carolyn Bishop, Powhatan County  
Carson Tucker, Powhatan County  
Rebecca Dickson, Goochland County  
Bill Hayden, DEQ  
Amy Ewing, DGIF  
Allester Watts, DGIF  
Robbie Rhur, DCR  
Lynn Crump, DCR  
Barry Matthews, VDH  
Paul Kohler, DEQ ORP  
Kotur Narasimhan, DEQ OADA  
Kelley H. West, DEQ PRO  
Ethel Eaton, DHR  
Julie Langan, DHR  
Roger Kirchen, DHR  
Melanie Allen, VDOT  
James Cromwell, VDOT  
James Thurston, DOC  
David Spears, DMME  
Keith Tignor, VDACS  
Brian Buniva, Eckert Seamans on behalf of  
William Arrington and Edward Tillman, Citizens  
Maryclay Smith, Citizen  
James Snyder, Citizen  
Eric Walters, Citizen  
Maxine Walters, Citizen  
Robert C. Williams, Citizen  
Meadows Family, Citizens  
Thomas L. Ford, Citizen  
Laura Graham, Dark Virginia Sky  
Sarah M. Donaldson, MACTEC  
Kathleen D. Regan, MACTEC



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### **COMMENTS OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY**

concerning the Environmental Impact Report submitted by the Department of State Police for the Virginia State Law Enforcement Training Facility in Powhatan County (Agency Code: 156, Project Code: 17805, DEQ 10-017S)

The Department of Environmental Quality (DEQ) has determined that the environmental impact report (EIR) for this project provides the information necessary for evaluation of the project's environmental impacts. The Department has completed its review. The following agencies, locality and planning district commission joined in this review:

Department of Environmental Quality  
Department of Game and Inland Fisheries  
Department of Conservation and Recreation  
Department of Health  
Department of Historic Resources  
Department of Corrections  
Department of Transportation  
Powhatan County  
Richmond Regional Planning District Commission

The Department of Mines, Minerals and Energy and the Virginia Department of Agriculture and Consumer Services also were invited to comment. In addition, Goochland County as well as citizens of Powhatan and Goochland counties offered comments and recommendations as well as identified concerns with the project as proposed. Reports from citizens and Powhatan County of land disturbance at or near the proposed project site are not discussed in this review because the Department of State Police (DSP) indicated that the activity was not part of the project under review.

The EIR, this report (the EIR review) and associated documents are available on the DEQ website at [www.deq.virginia.gov/eir/majstate.html](http://www.deq.virginia.gov/eir/majstate.html).

## **PROJECT DESCRIPTION**

DSP submitted an EIR for the development of a training facility for law enforcement personnel along Old River Trail in Powhatan County. DSP is proposing to develop the facility on an 18-acre parcel (email, R.Rice/J.Wellman, April 6, 2010) within the existing Deep Meadows Correctional Center. The EIR indicates that training needs and certification standards necessitate the proposed range. The report also states that other training facilities are rapidly deteriorating, do not have functional target systems and do not provide indoor and close-quarter training opportunities. DSP proposes to construct four outdoor firing ranges (81 total shooting lanes) with an associated range tower and two small restroom structures (475 square feet each) during the first phase, and a classroom building (4,800 square feet), live fire building (2,500 square feet) and a bunkhouse (7,200 square feet) during subsequent phases. Approximately 14 acres of land will be disturbed at the proposed project site, which primarily consists of grass and pasture cover. DSP confirmed that the Secretary of Administration approved a land transfer agreement from the Department of Corrections (DOC) for the parcel to DSP on March 11, 2010 (email, R. Rice/J. Wellman, March 17, 2010). DOC states that it has no ownership of the proposed project (email, J.Thurston/J.Wellman, March 17, 2010), contrary to information in the EIR. DOC owns the land surrounding the proposed project site.

## **CONCLUSION**

Reviewing agencies did not object to the project based on environmental, historic, agricultural or transportation concerns and did not identify any adverse impacts that cannot be mitigated. As a result, from the environmental perspective, DEQ has no objections to the proposed project provided that regulatory requirements and recommendations in the enclosed comments are followed. Recommendations include the following:

- Follow the Environmental Protection Agency's (EPA) study titled, "Best Management Practices (BMPs) for Lead at Outdoor Shooting Ranges" and install BMPs for lead containment.
- Mitigate negative impacts to the scenic qualities of the Old River Trail/Route 617 byway.
- Conduct a Phase I archaeological survey and a historic architectural study.

Provided activities are performed in accordance with the recommendations which are contained in this review, this project is unlikely to have significant effects on ambient air quality, water quality, architectural or archaeological resources, wildlife or forest resources. It will not adversely affect species of plants, animals or insects listed by state

agencies as rare, threatened or endangered.

However, DEQ submitted the project as “non-routine” in its memo to the Secretary of Administration because of the objection to the proposed project by Powhatan County, including the County’s Board of Supervisors. The Goochland County Board of Supervisors and citizens of both Goochland and Powhatan counties have expressed their opposition to the project as proposed. Many of the concerns of the County and the citizens are related to local land uses (for example, noise concerns) and are beyond the scope of the EIR review and the jurisdiction of state agencies. DSP and Powhatan County have communicated on these issues; however, the County’s concerns remain. DSP states that it needs the proposed facility to meet its training needs.

## **SUMMARY OF LOCAL OPPOSITION**

Powhatan County has a number of concerns regarding the proposed project. These concerns include the following:

- the proposed location;
- public safety;
- the sources of funding;
- range design, including the effectiveness of an earthen berm to protect citizens from errant rounds;
- adverse noise impacts to residents;
- the potential loss of agricultural land;
- hours of operation;
- analysis of alternatives;
- loss of property values;
- impact to the rural nature of the community;
- lead management and potential environmental impacts;
- lack of comprehensive information in DSP’s EIR and responses;
- adverse impacts to historic sites; and
- transportation impacts.

The Boards of Supervisors for Powhatan County and Goochland County have passed resolutions (attached) opposing the project, and many citizen groups and families living near the proposed project site have indicated that they also are opposed to the location of the firing range. The public comments, including a report developed by citizens as a result of a June 8, 2010, public meeting with DSP, submitted to DEQ reflect the concerns of Powhatan County. A July 28, 2010, letter from Brian L. Buniva of Eckert Seamans and a July 27, 2010, report from Balzer and Associates were submitted on

behalf of two residents. The report considers the possible effects of development on personal safety and disturbance of the peace in relation to the proposed firing range. In both areas, the report states that a review of the proposed project has identified the potential for significant impacts to the surrounding community. The report states that the construction of a firing range on the property does not seem to fit with the intended use for Public Use Land (which the land is designated), according to the County's Comprehensive Plan. Regarding public safety, the report states that it would take a 0.30-degree margin of error in the scope calibration of the shooter's accuracy for a bullet to potentially clear the berm behind the target area. The report also states that the design of the firing range is only minimally effective at reducing the noise that will be created, if at all. Powhatan County has indicated that it endorses the Balzer and Associates report.

## **PUBLIC COMMENTS**

The Virginia Code Sections 10.1-1188 *et seq.* defining EIR requirements do not include provisions for public participation during an EIR review. However, in adhering to DEQ's Values Statement that calls for a free exchange of information and responsive, courteous interactions with stakeholders, DEQ has reported citizens' general concerns above and has attached public comments (Appendix D), submitted to the DEQ Office of Environmental Impact Review (OEIR). These comments are also available on the DEQ website at [www.deq.virginia.gov/eir/majstate.html](http://www.deq.virginia.gov/eir/majstate.html). Most of the written comments object to the project as proposed, and nearly all comments (both written and verbal) have expressed concern about potential effects from the proposed facility. To be consistent with the EIR review process, this review does not include details of all public comments. Where appropriate and when a response from DSP has provided clarification, DEQ OEIR has included the additional information provided by DSP. As mentioned above, the substantive elements of comments submitted by citizens are reflected in Powhatan County's comments, which DEQ is required to consider in substantially the same manner as DEQ considers comments from state agencies. The County's comments are detailed in item 16(b) and other sections as appropriate.

## **MEDIA COVERAGE**

Several media outlets, primarily the *Richmond Times-Dispatch*, have covered the proposed project on several occasions. The articles focus on objections raised by Powhatan County and citizens in Powhatan and Goochland counties. The June 8, 2010, public meeting also was covered, and it was reported that approximately 350 people attended the meeting.

## REVIEW SUMMARY

During the course of the DEQ's coordinated EIR review, which started in February 2010, Mr. Carson Tucker, who is a member of the Powhatan County Board of Supervisors, responded on behalf of the County and indicated that the proposed project site was unsuitable for DSP's intended purpose and requested additional information. The County's concerns and requests for information included details related to the perimeter of the earthen berms for noise protection; clarification on potential traffic impacts to Old River Trail; the facility's plans for lighting, utilities, security and lead management; and effects of the project on historic sites and agricultural production. In the County's response, a meeting with DSP was requested. DEQ understands that DSP then offered to meet with Powhatan County. DEQ also asked several state agencies to review and respond, as necessary, regarding Mr. Tucker's concerns. Since DEQ is required to consider local comments in substantially the same manner as it considers comments from state agencies, the additional information and coordination between the County and DSP was necessary before DEQ OEIR could complete the project review and submit the Commonwealth's recommendations to the Secretary of Administration. On April 8, 2010, DEQ OEIR suspended the 60-day review to allow for coordination efforts and a potential resolution of concerns. On May 3, 2010, DEQ received (email, R. Rice/J. Wellman) information from DSP that responded to several of the County's concerns.

DSP attended a public information meeting with citizens, Powhatan County officials and members of the General Assembly on June 8, 2010. At the public meeting, County officials and residents objected to the DSP proposal to construct the training facility at its proposed location. DSP verbally confirmed on June 10, 2010, that it preferred to continue with the project as proposed since the location of range was the main concern of the County and it does not affect the operation of the range. DEQ received DSP's written confirmation of this decision and a summary of coordination efforts (letter dated June 28, 2010) on June 29, 2010. DEQ requested additional information on alternative sites on June 29, and DSP responded via email on July 1, 2010. The beginning of the second 60-day review period began on July 1, and DEQ emailed the DSP response to Powhatan County and several state agencies. None of the agencies had additional comments, but Mr. Tucker indicated that the County would comment and requested a deadline extension to allow a consultant and an attorney to comment on the County's behalf.

On July 27, DEQ OEIR received an email from Mr. Tucker (on behalf of the County) commenting on DSP's response. DEQ also received a package of comments on July 28 from Mr. Brian Buniva, an attorney who states that his clients are two citizens from Powhatan County. These comments identified potential environmental, safety and

noise issues as they pertain to the proposed firing range. Powhatan County indicated that it endorses the information submitted by Mr. Buniva. DEQ provided these comments (as well as comments received on July 27 from Powhatan County) to the DSP and several state agencies on July 29 and asked for comments, if any, by August 9. DEQ did not receive additional comments. Powhatan County has indicated that its concerns remain unresolved. Citizens of both Powhatan and Goochland counties remain opposed to the project as proposed. According to Powhatan County, there also are a number of citizen groups and organizations that are opposed to the project. DEQ's legal deadline for completing the Commonwealth's review and submitting its report to the Secretary of Administration is August 27, 2010.

In addition, DEQ received an email from the Department of Historic Resources (DHR) on July 28 with correspondence from the Federal Bureau of Investigation (FBI) stating that it is terminating its involvement with the development of the range in Powhatan County. The status of federal funding, beyond comments received via DHR regarding the applicability of requirements pursuant to Section 106 of the National Historic Preservation Act, does not affect the applicability of the EIR Law.

## **FUTURE EIR REQUIREMENTS**

The EIR states that it contains a master plan for the facility and that the construction will be completed in phases. The EIR addresses potential impacts for all phases, where possible. If the proposed master plan or location changes, a separate EIR that addresses potential impacts from development may need to be submitted to the DEQ OEIR for review, pursuant to Virginia Code sections 10.1-1188 *et seq.* and the EIR Procedure Manual developed pursuant to Virginia Code section 10.1-1191. The EIR Procedure Manual may be found at [www.deq.virginia.gov/eir/stateimpact.html](http://www.deq.virginia.gov/eir/stateimpact.html).

## **ENVIRONMENTAL IMPACTS AND MITIGATION**

**1. Water Quality and Wetlands.** According to the EIR (page 4-10), there are no wetlands on the proposed project site. The EIR states that there are no perennial streams on the site. However, the EIR (page 4-10) states that runoff from four drainage areas conveys to an intermittent stream that is located to the west of the project area.

**1(a) Agency Jurisdiction.** The State Water Control Board promulgates Virginia's water regulations, covering a variety of permits to include Virginia Pollutant Discharge Elimination System Permit, Virginia Pollution Abatement Permit, Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection (VWP) Permit. The VWP Permit is a state permit which governs wetlands, surface water and surface water withdrawals/impoundments. It also serves as § 401 certification of the federal Clean



Water Act § 404 permits for dredge and fill activities in waters of the United States. The VWP Permit Program is under the Office of Wetlands and Water Protection and Compliance within the DEQ Division of Water Quality Programs. In addition to central office staff who review and issue VWP Permits for transportation and water withdrawal projects, the six DEQ regional offices perform permit application reviews and issue permits for the covered activities.

**1(b) Agency Comments.** The DEQ Piedmont Regional Office (PRO) states that the site drains to the James River.

**1(c) Local Comments.** Powhatan County (email, C.Tucker/R.Rice/J.Wellman, March 26, 2010) requested more information about lead management at the proposed facility.

**1(d) DSP Response.** DSP states (email, R.Rice/J.Wellman, June 1, 2010) that the target system to be constructed at this range will have a lead collection trap system. DSP also states (letter, R.Rice/J.Wellman, June 28, 2010) that all gun firing will occur toward the James River with a lead collection backstop system in place (see item 4 for additional information).

**1(e) Agency Comments.** In response to issues raised by Powhatan County, DEQ PRO states that it has taken several water samples and sediment samples around established shooting ranges to test for lead contamination. All the water samples were below the detection limit for lead. One sediment sample was below the detection limit and all other sediment samples were an order of magnitude below the effects range median (ERM). ERM is the concentration of a contaminant above which harmful effects always or almost always occur.

**1(f) Agency Recommendations.** The following recommendations would apply during all construction phases of the project:

- Follow the EPA study titled, "Best Management Practices (BMPs) for Lead at Outdoor Shooting Ranges" ([www.epa.gov/region2/waste/leadshot](http://www.epa.gov/region2/waste/leadshot)) and install BMPs for lead containment.
- Properly implement and maintain erosion and sediment controls during construction activities.
- Inspect and repair erosion and sediment controls and BMPs before and after rain events.
- Follow all standards and specifications under the *Virginia Erosion and Sediment Control Handbook*, 1992.
- Maximize pervious surface areas and green spaces in the construction design to reduce runoff and the environmental impact associated with urban runoff.

Contact Kelley West with DEQ PRO at (804) 527-5029 for additional information on these recommendations.

**2. Erosion and Sediment Control and Stormwater Management.** The EIR (pages 5-2 and 5-3) states that stormwater management methods will include grassed swales, a bio-retention basin, additional filter units to mitigate the potential for lead contamination and vegetative cover.

**2(a) Erosion and Sediment Control Project-Specific Plans.** According to the Department of Conservation and Recreation (DCR) Division of Soil and Water Conservation (DSWC), DSP must submit a project-specific erosion and sediment control plan for review and approval by DCR, if the state agency project results in a land-disturbing activity of equal to or greater than 10,000 square feet. An approved plan is required prior to initiation of any land-disturbing activity at the project site. All regulated land-disturbing activities, including on- or off-site access roads, staging areas, spoil or borrow areas, stockpiles and soil intentionally transported from the project, must be covered by an project-specific erosion and sediment control plan. Further, specifications and plans must be prepared in accordance with the most current version of the *Virginia Erosion and Sediment Control Handbook*, Virginia Erosion and Sediment Control Law (VESCL) and Regulations (VESCR).

**2(b) Stormwater Management Project-Specific Plans.** For state-agency projects that involve a land-disturbing activity of 1 acre or more, DSP must prepare a project-specific stormwater management plan for review and approval by DCR. An approved plan is required prior to initiation of any regulated activities at the project site. The project-specific stormwater management plan must be prepared in accordance with the Virginia Stormwater Management Act (VSWMA) and the Virginia Stormwater Management Program (VSMP) Permit Regulations.

**2(c) VSMP General Permit for Construction Activities.** For projects involving land-disturbing activities equal to or greater than 1 acre, the operator or owner are required to apply for registration coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project-specific stormwater pollution prevention plan (SWPPP).

- Construction activities requiring registration also include the land-disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan of development will ultimately disturb equal to or greater than one acre.
- The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit.

- The SWPPP must address water quality and quantity in accordance with the VSMP Permit Regulations.

General information and registration forms for the general permit are available on DCR's website at [www.dcr.virginia.gov/soil\\_and\\_water/index.shtml](http://www.dcr.virginia.gov/soil_and_water/index.shtml).

**3. Air Quality.** The EIR (page 5-2) states that air quality impacts during construction will be limited to emissions from heavy equipment and dust, which will be mitigated by a water spraying program. Lead bullets will be captured by a bullet trap to limit shatter and related dust during operation of the facility.

**3(a) Agency Jurisdiction.** The DEQ Air Division, on behalf of the State Air Pollution Control Board, is responsible for developing regulations that become Virginia's Air Pollution Control Law. DEQ is charged with carrying out mandates of the state law and related regulations as well as Virginia's federal obligations under the Clean Air Act as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate regional office is directly responsible for the issuance of necessary permits to construct and operate all stationary sources in the region as well as monitoring emissions from these sources for compliance. As a part of this mandate, EIRs of projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

**3(b) Ozone Attainment Area.** According to the DEQ Air Division, the project site is located in an ozone attainment area.

**3(c) Open Burning.** If project activities include the burning of vegetative debris, this activity must meet the requirements under 9VAC5-130 *et seq.* of the regulations for open burning, and it may require a permit. The regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. DSP should contact officials with Powhatan County to determine what local requirements, if any, exist.

**3(d) Fugitive Dust.** During construction, fugitive dust must be kept to a minimum by using control methods outlined in 9VAC5-50-60 *et seq.* of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

**3(e) Agency Comment.** Permits may be required for any boilers or fuel-burning equipment.

**3(f) Agency Recommendation.** Contact James Kyle with DEQ PRO at (804) 527-5047 prior to construction for a permitting determination if fuel-burning and/or other air-pollution-emitting equipment will be used.

**3(g) Agency Requirement.** DSP must follow all air quality standards and specifications to reduce or avoid the emissions of volatile organic compounds (VOCs), especially during periods of high ozone.

**4. Solid and Hazardous Wastes.** The EIR (page 5-5) states that DSP will implement a lead management plan that will include bullet containment backstops, testing and control of soil pH, site inspections and the recycling of lead bullets. According to the EIR (page 2-3), lead waste will be managed with BMPs for the range.

**4(a) Agency Jurisdiction.** Solid and hazardous wastes in Virginia are regulated by DEQ, the Virginia Waste Management Board and the U.S. Environmental Protection Agency. They administer programs created by the federal Resource Conservation and Recovery Act, Comprehensive Environmental Response Compensation and Liability Act, commonly called Superfund, and the Virginia Waste Management Act. DEQ administers regulations established by the Waste Management Board and reviews permit applications for completeness and conformance with facility standards and financial assurance requirements. All Virginia localities are required, under the Solid Waste Management Planning Regulations, to identify the strategies they will follow on the management of their solid wastes to include items such as facility siting, long-term (20-year) use and alternative programs such as materials recycling and composting.

**4(b) Agency Findings.** The DEQ Waste Division states the report did not include a search of waste-related databases. A Geographic Information System (GIS) database search did not reveal any waste sites within a half mile radius that would impact or be impacted by the subject site. The Waste Division performed a cursory review of its data files and determined that there is one solid waste site (Permit-by-Rule 175, In-Vessel Composting Facility) located within the same zip code; however, its proximity to the

subject site is unknown.

**4(c) Local Comments.** Powhatan County (email, C.Tucker/R.Rice/J.Wellman, March 26, 2010) requested more information about lead management at the proposed facility.

**4(d) DSP Response.** DSP states (email, R.Rice/J.Wellman, June 1, 2010) that the target system to be constructed at this range will have a lead collection trap system so that the lead can be recycled and not have to be treated as hazardous waste. DSP also states (letter, R.Rice/J.Wellman, June 28, 2010) that all gun firing will occur toward the James River with a lead collection backstop system in place (see item 1 for more information).

**4(e) Agency Recommendations.** DEQ encourages all projects and facilities to implement pollution prevention principles, including:

- the reduction, reuse and recycling of all solid wastes generated; and
- the minimization and proper handling of generated hazardous wastes.

**4(f) Agency Requirements.**

- It is the generator's responsibility to determine if a solid waste meets the criteria of a hazardous waste and as a result, should be managed as such.
- Any soil that is suspected of contamination or solid wastes that are generated during demolition activities must be tested and disposed of in accordance with applicable federal, state and local laws and regulations.
- Generated asbestos waste, lead waste or contaminated residues must be handled and disposed of in accordance with Virginia's solid or hazardous waste management regulations.

Contact Kyle Winter with DEQ PRO at (804)527-5052 if you have any questions concerning hazardous and solid waste management.

**5. Natural Heritage Resources.** The EIR (page 5-3) states that since the proposed project site has been previously cleared and disturbed, no habitat destruction will occur.

**5(a) Agency Jurisdiction.** The mission of DCR is to conserve Virginia's natural and recreational resources. DCR supports a variety of environmental programs organized within seven divisions, including the Division of Natural Heritage (DNH). DNH's mission is conserving Virginia's biodiversity through inventory, protection and stewardship. The Virginia Natural Area Preserves Act, 10.1-209 through 217 of the *Code of Virginia*, was passed in 1989 and codified DCR's powers and duties related to statewide biological

inventory: maintaining a statewide database for conservation planning and project review, land protection for the conservation of biodiversity, and the protection and ecological management of natural heritage resources (the habitats of rare, threatened and endangered species, significant natural communities, geologic sites, and other natural features).

**5(b) Agency Findings.** According to the information currently in DCR's files, the James River Stream Conservation Unit (SCU) is downstream of the project site. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are given a biodiversity significance ranking based on the rarity, quality and number of element occurrences they contain on a scale of 1 to 5 with 1 being the most significant. The James River SCU has been given a biodiversity significance ranking of B3, which represents a site of high significance. The natural heritage resources of concern associated with this SCU are the following freshwater mussels:

- (i) *Alasmidonta varicose* (Brook floater, G3/S1/NL/LE); and
- (ii) *Ellipitio lanceolata* (Yellow lance, G2G3/S2S3/SOC/SC).

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization and dredging, and the invasion of exotic mollusk species.

In addition, the James spiny mussel (*Pleurobema collina*, G1/S1/LE/LE) has been historically documented in the James River. The James spiny mussel is endemic to the James River watershed and occurs in a variety of substrata, ranging from sand and silt mixtures to gravel and sand mixed with rubble, and in a variety of flow regimes (Clarke and Neves, 1984; Hove and Neves, 1994). It is now restricted to small headwater streams of this watershed (Neves, 1991). Threats to the James spiny mussel include competition with the exotic clam (*Corbicula fluminea*), erosion and sedimentation from logging, road construction, livestock grazing, sewage effluent and water quality degradation (Neves, 1991). This species is currently classified as endangered by the U.S. Fish and Wildlife Service (FWS) and the Virginia Department of Game and Inland Fisheries (DGIF).

Furthermore, the James River has been designated by DGIF as a Threatened and

Endangered Species Water because of the Atlantic pigtoe (*Fusconaia masoni*, G2/S2/SOC/LT) and the Brook floater.

**5(c) State-listed Plant and Insect Species.** The Endangered Plant and Insect Species Act of 1979, Chapter 39 §3.1-1020 through 1030 of the Code of Virginia, as amended, authorizes the Virginia Department of Agriculture and Consumer Services (VDACS) to conserve, protect and manage endangered and threatened species of plants and insects. The VDACS Virginia Endangered Plant and Insect Species Program personnel cooperates with the U.S. FWS, DCR DNH and other agencies and organizations on the recovery, protection or conservation of listed threatened or endangered species and designated plant and insect species that are rare throughout their worldwide ranges. In those instances where recovery plans, developed by FWS, are available, adherence to the order and tasks outlined in the plans should be followed to the extent possible.

VDACS has regulatory authority to conserve rare and endangered plant and insect species through the Virginia Endangered Plant and Insect Species Act. Under a Memorandum of Agreement established between VDACS and DCR, DCR has the authority to report for VDACS on state-listed plant and insect species. DCR found that the current activity will not affect any documented state-listed plant and insect species.

**5(d) State Natural Area Preserves.** DCR's files do not indicate the presence of any State Natural Area Preserves under the agency's jurisdiction in the project vicinity.

**5(e) Agency Recommendations.**

- Contact the DCR DNH at (804) 371-2708 for an update if a significant amount of time passes before the natural heritage information is utilized since new and updated information is continually added to the Biotics Data System.
- Implement and strictly adhere to applicable state and local erosion and sediment control and stormwater management laws and regulations to minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities.
- Coordinate with the FWS and DGIF to ensure compliance with protected species legislation due to the legal status of the Brook floater, the Atlantic pigtoe and the James spinymussel.

Contact Rene Hypes with DCR DNH at (804) 371-2708 for additional information on these recommendations.

**6. Wildlife Resources.** The EIR (page 5-3) indicates that the proposed project would not threaten protected species.

**6(a) Agency Jurisdiction.** The DGIF, as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state- or federally-listed endangered or threatened species, but excluding listed insects (Virginia Code Title 29.1). DGIF is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 *et seq.*) and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce or compensate for those impacts. For more information, see the DGIF website at [www.dgif.virginia.gov](http://www.dgif.virginia.gov).

**6(b) Agency Findings.** According to DGIF's records, the James River is located in the project vicinity and has been designated a Threatened and Endangered Species Water due to the presence of state-listed endangered brook floater and state-listed threatened Atlantic pigtoe. In addition, this river has been designated an Anadromous Fish Use Area.

A review of aerial photography and DGIF's hydrography data layer confirms that there are no streams on the project site. Assuming instream work is not necessary to access, construct, and/or maintain this site and assuming adherence to erosion and sediment controls during construction, DGIF does not anticipate this project to result in adverse impacts upon the listed wildlife resources mentioned above.

**6(c) Agency Recommendations.**

If instream work is necessary, coordinate with DGIF (Amy Ewing at 804-367-2211 or [Amy.Ewing@dgif.virginia.gov](mailto:Amy.Ewing@dgif.virginia.gov)) to ensure protection of listed wildlife resources under its jurisdiction.

DGIF recommends the following measures to minimize overall impacts to wildlife and natural resources:

- Avoid and minimize impacts to undisturbed forest, wetlands and streams to the fullest extent practicable;
- Maintain wooded lots to the fullest extent possible;
- Adhere to a time-of-year restriction from March 15 through August 15 of any year for all tree removal and ground clearing (if tree removal is necessary to develop access to the site, provide staging areas or for any other reason) to protect nesting resident and migratory songbirds;
- Maintain undisturbed wooded buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams; and



- Design stormwater controls to replicate and maintain the hydrographic condition of the site prior to the change in landscape. This should include, but not be limited to:
  - utilizing bioretention areas; and
  - minimizing the use of curb and gutter in favor of grassed swales.

Bioretention areas (also called rain gardens) and grass swales are components of low impact development. They are designed to capture stormwater runoff as close to the source as possible and allow it to slowly infiltrate into the surrounding soil. They benefit natural resources by filtering pollutants and decreasing downstream runoff volumes.

Contact Amy Ewing with DGIF at 804-367-2211 or [Amy.Ewing@dgif.virginia.gov](mailto:Amy.Ewing@dgif.virginia.gov) for questions related to these recommendations.

**7. Scenic Byway.** The EIR does not address potential impacts to Scenic Byways.

**7(a) Agency Jurisdiction.** DCR's Division of Planning and Recreational Resources (DPRR) administers the Virginia Scenic Rivers, Virginia Byways, and state trails programs and is responsible for developing the Virginia Outdoors Plan (VOP), the state's comprehensive outdoor recreation and open space plan. The VOP recognizes the importance of scenery to Virginians. A Virginia Byway is a highway designated by the Commonwealth Transportation Board (CTB) pursuant to Virginia Code §33.1-62 through §33.1-66. The Virginia Outdoors Plan, from DCR, identifies roads that have been considered as having intrinsic qualities of Virginia Byways for many years. The Virginia Department of Transportation (VDOT), DCR and the Commonwealth Transportation Board encourage local governments to nominate roads for Virginia Byway designation. Additional information is available online at [www.virginiadot.org/programs/faq-byways.asp](http://www.virginiadot.org/programs/faq-byways.asp).

**7(b) County Comments.** Powhatan County indicates (email, C.Tucker/R.Rice/J.Wellman, March 26, 2010) that Old River Trail is a Scenic Byway. The County states that it is concerned about its potential degradation and believed that access to the proposed facility would be through the DOC property and not via Old River Trail.

**7(c) DSP Comment.** DSP states (email, R.Rice/J.Wellman, April 6, 2010) that access to the site will be via an internal access road that connects to state Route 617 (Route 617 is Old River Trail).

**7(d) Agency Findings.** DCR DPRR states (email, L. Crump/J.Wellman, June 25, 2010) that it does not anticipate the need for road improvements. VDOT states (email,

J.Cromwell/J.Wellman, June 25, 2010) that Old River Trail, also known as Route 617, is a state designated Virginia Byway. VDOT states that the proposed project would have no impact on the Virginia Byway designation.

**7(e) Agency Recommendations.** DCR DPRR (email, L. Crump/J.Wellman, June 25, 2010) has the following recommendations:

- Mitigate negative impacts to the scenic qualities of the byway.
- Plant screening trees along the byway and the entrance road to the project.
- If the access road is upgraded, develop the intersection in a way to enhance the safe travel along the road and not diminish the scenic qualities of the byway.

Contact Lynn Crump with DCR DPRR at (804) 786-5054 or James Cromwell with VDOT at (804) 225-3608 for additional information on recommendations associated with Old River Trail.

**8. Historic and Archaeological Resources.** According to the EIR (page 5-3), significant archaeological sites or historic structures have not been identified on the project site. In addition, the report (page 4-11) states that a review of cultural resources has not been completed.

**8(a) Agency Jurisdiction.** DHR conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State's Historic Preservation Office, ensures that federal actions comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and its implementing regulation at 36 CFR Part 800. The NHPA requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places (NRHP). Section 106 also applies if there are any federal involvements, such as licenses, permits, approvals or funding.

**8(b) Local Comments.** Powhatan County states (email, C.Tucker/R.Rice/J.Wellman, March 26, 2010) that it has concerns regarding impacts to historic resources, including Shiloh Baptist Church. In addition, the County states (July 25 attachment to July 27 email, D.Livick/R.Rice/J.Wellman) that DSP has indicated that Shiloh Baptist Church will notify the range officer of planned activities, including church services, funerals, weddings and Bible studies. The range officer will suspend firing for the duration of such activities.

**8(c) DSP Comments.** DSP states (letter, R.Rice/J.Wellman, June 28, 2010) that DSP has made a commitment to the church leaders of Shiloh Baptist Church that whenever the church is conducting any type of formal service at the church site, DSP will not

conduct any range operations. DSP states that this is contingent upon the church giving DSP advance notice. DSP also states that numerous comments have been made about the historical nature of the area. DSP states that the historical database available to DSP by the Commonwealth does not reference any historical property or artifacts that the facility would directly affect. DSP states that the proposed facility is on and in very close proximity to an existing major correctional facility, which to DSP's knowledge has not been referenced as affecting any historical properties.

***8(d) Agency Comments.***

- DHR (email, R. Kirchen/J. Wellman, March 4, 2010) states that although the EIR does not demonstrate due diligence in the consideration of the project's potential impact to historic resources, based on the information provided and the data available within its archives, this project is unlikely to negatively impact historic resources listed in or eligible for listing in the Virginia Landmarks Register.
- DEQ provided additional information to DHR (email, J. Wellman/R. Kirchen, March 29, 2010) in response to comments from Powhatan County (submitted March 26, 2010). DHR, in response, states that based on the data in its archives, the Shiloh Baptist Church (DHR ID #072-0087) was organized in 1866 and a church was built later. The original church burned in 1898 and was rebuilt by 1900. It is DHR's opinion that Powhatan County is an important stakeholder in this review process and its concerns should be meaningfully addressed. As reported in the EIR (Section 4.14), a cultural resource study has not been completed.
- DHR indicates (letter, R. Kirchen/J. Wellman, July 14, 2010) that DSP states in its June 28, 2010, letter that the database, available via DHR, does not reference any historic property that would be affected. While DHR's archives do not show any recorded historic resource in the proposed footprint of the facility, DHR's records also provide no evidence that the project area has ever been systematically surveyed for historic resources.
- DHR states (letter, R. Kirchen/J. Wellman, July 14, 2010) that the historic significance of and potential impacts to Shiloh Baptist Church (DHR ID #072-0087) and Coverdale/Pleasant Oaks (DHR ID #072-0085) have been argued. DHR's March 30, 2010, correspondence to DEQ highlighted these concerns and included DHR's recommendation for evaluation of these resources as eligible for listing in the NRHP as well as an assessment of potential impact. Regarding archaeological resources, evidence supporting the potential for undocumented

sites within the project area has been provided, including data on adjacent sites and photographs of an artifact collected nearby.

**8(e) Agency Findings.**

- DHR states that Shiloh Baptist Church has not been evaluated for listing in the Virginia Landmarks Register or the NRHP.
- This project has the potential to indirectly affect the setting, feeling, and character of surrounding resources beyond the limits of the project area.

**8(f) Agency Recommendations.** DHR has the following recommendations:

- Based on the additional information from Powhatan County, complete a study that evaluates the historic significance of Shiloh Baptist Church and the adjacent Cloverdale/Pleasant Oaks (DHR ID #072-0085) and assesses the following:
  - (i) potential impact of the construction and operation of the facility on any resource considered eligible for listing in the NRHP and
  - (ii) the historic significance of and potential effect to other neighboring properties.
- Coordinate with DHR (Roger Kirchen at [Roger.Kirchen@dhr.virginia.gov](mailto:Roger.Kirchen@dhr.virginia.gov)) and Powhatan County (Carolyn Bishop, County Administrator, at [cbishop@powhatanva.gov](mailto:cbishop@powhatanva.gov)) regarding the results of the study.
- If it is determined, in consultation with DHR and Powhatan County, that this project will negatively impact significant resources, implement measures to minimize or otherwise mitigate impacts.
- Allow Powhatan County an opportunity to participate in all stages of this consultation.
- Assess the potential for archaeological sites within the footprint of the proposed facility through a Phase I archaeological survey conducted by a qualified professional and in accordance with DHR's guidelines.
- Obtain a permit from DHR prior to any archaeological study.
- Provide results of the archaeological and architectural surveys to DHR for review and comment prior to beginning this project. DHR will advise the DSP on the need for additional evaluative or mitigative action.
- If this project includes federal involvement, contact DHR (Roger Kirchen at 804-367-2323, ext. 153. or [Roger.Kirchen@dhr.virginia.gov](mailto:Roger.Kirchen@dhr.virginia.gov)) to ensure compliance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR 800, as applicable.

Contact Roger Kirchen with DHR at [Roger.Kirchen@dhr.virginia.gov](mailto:Roger.Kirchen@dhr.virginia.gov) for additional information on these comments and recommendations.

**9. Public Water Supply and Sewerage.** The EIR (page 2-3) states water will be provided by a potable well. The report (page 2-3) states that two septic systems and leach fields will be installed.

**9(a) Agency Jurisdiction.** The Virginia Department of Health (VDH) Office of Drinking Water reviews projects for the potential to impact public drinking water sources (groundwater wells, springs and surface water intakes).

**9(b) Agency Comment.** The James River Correctional Center surface water intake is located proximate to this proposed facility.

**9(c) Agency Findings.** VDH states there are potential impacts to public drinking water sources due to this project. No groundwater wells are within a 1-mile radius of the project site. One surface water intake (James River Correctional Center's James River Intake) is located within a 5-mile radius of the project site and is approximately 2.8 miles downstream. The project falls within Zone 1 (within the source's watershed and within five miles) and Zone 2 (within the source's watershed and up gradient) of this public surface water source.

**9(d) DSP Response.** In response to a citizen's comments, DSP states (email, R.Rice/J.Wellman, June 1, 2010) that the septic tank and drain field system will be designed by a professional engineer in accordance with the VDH requirements and a permit obtained for its construction in accordance with Commonwealth of Virginia requirements.

**9(e) Agency Requirement.** VDH states that potential impacts to public water distribution systems and sanitary wastewater collection systems must be verified by the local utility.

**9(f) Agency Recommendations.** VDH has the following recommendations:

- Implement best management practices, including erosion and sedimentation controls as well as spill prevention, controls and countermeasures, on the project site.
- Notify the DOC James River Correctional Center Water Treatment Plant (Herbert Lee Puett at 804-784-3551, ext. 2298) regarding the scope of this project.
- Contact the VDH East Central Field Office at (804) 674-2880 to ensure compliance with well and septic system permitting requirements.
- Evaluate the James River Correctional Center infrastructure to determine if it could be extended to and used by the DSP facility.

Contact Barry E. Matthews with VDH at (804) 864-7515 for additional information.

**10. Transportation Impacts.** The EIR (page 5-1) states that it has not received a determination from the Virginia Department of Transportation (VDOT) regarding whether a traffic study is necessary. The report (page 4-8) states that access to the facility will be through state property and no additional access to public roads is planned.

**10(a) Agency Jurisdiction.** VDOT provides comments pertaining to potential impacts to existing and future transportation systems.

**10(b) Agency Finding.** The VDOT Richmond District Transportation Planning Office states that based upon the limited information provided, the proposed project will not substantially impact the state's transportation facilities.

**10(c) Local Concerns.** Powhatan County states that all projects in the County of this potential impact need a traffic impact study.

**10(d) DSP Response.** In response to Powhatan County's concerns regarding access to the site and any associated impact to Old River Trail, DSP states that DOC property completely surrounds the range. To gain access to the site, DSP will use State Route 617 and then an internal DOC-access road.

DSP states (letter, R.Rice/C.Tucker, May 3, 2010) that it has made additional inquiries with VDOT and personnel with the Powhatan County Planning Office. DSP was instructed by both authorities to proceed with the VDOT entrance permit and that a traffic impact study would not be required. The entrance permit was applied for on April 20, 2010. The access will be considered a private entrance and will be gated and controlled.

DSP also states (letter, R. Rice/J.Wellman, June 28, 2010) that according to an analysis of the three parties' use of the range, the maximum number of vehicles that would travel to the range is 35 vehicles at a given time. DSP does not believe this creates any burden to the area or public road system.

**10(e) Agency Comments.** VDOT states that non-residential development (a development which generates 250 or more vehicles in the peak hour) would trigger a need for a Chapter 527 study. A firing range is not normally a high traffic generator; a comparison of this proposed firing range to other firing ranges would better answer the question (raised by Powhatan County) of potential transportation impacts. A VDOT project (UPC 19056) is currently under design at Route 711 and Pleasants Road that

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Law Enforcement Training Facility  
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accommodates some expected growth on Route 711 and Pleasant Road.

Contact Ron Svejksky, VDOT Transportation Planning Engineer, at (804) 524-6002 for additional information.

**11. Agricultural Lands.** The EIR (page 4-7) states that the property is not being used to produce any food, forest product or significant agricultural crop at this time. According to the report (4-7), the project site is currently vacated agricultural land consisting primarily of grass and pasture cover. The report (page 4-6) states that the Powhatan County zoning map indicates the property is "public land."

**11(a) Agency Jurisdiction.** In accordance with Virginia Code §§ 3.2-204 and 3.2-205, an EIR prepared for a state project must consider the impacts of the project on farm and forest lands and consider alternatives and mitigating measures. The DEQ, in conducting its review of each major state project, ensures that such consideration has been demonstrated and shall incorporate an evaluation of the effects that project would have on farm and forest lands in its comments to the Governor. Accordingly, DEQ invited the Virginia Department of Agriculture and Consumer Services (VDACS) to comment on this project.

**11(b) County Comments.** Powhatan County states (July 25 attachment to July 27 email, D.Livick/R.Rice/J.Wellman) that section 4.4 of the EIR states, "At this time, the property is not being used to produce any food, feed, fiber, forest product, forage or other agricultural crop of significant value to the community." This is repeated verbatim in section 5.4. Section 5.10 contradicts sections 4.4 and 5.4. Those who live in the County can attest to bumper crops of corn and forage. Furthermore, in July of this year, the attached photograph was taken. It shows exactly the acreage of the proposed range. Clearly, the EIR sections 4.4 and 5.4 are wrong. This is indeed productive land and has been for many years. The nearest neighbor to the firing range, a farmer whose family has farmed the land for 150 years and who has a cooperation handshake agreement with DOC Farm Management for mutual help in emergency situations, was told this past week that DOC Farm Management was dismayed to have this productive land withdrawn from production.

**11(c) DSP Response.** In response to questions asked by a citizen, DSP states (email, R.Rice/J.Wellman, June 1, 2010) that the proposed location is part of the farm or agriculture tract of land at the Powhatan Correctional Center. The proposed location is not currently farmed by the correctional center and is the location that DOC indicated would be best suited for the range.

**11(d) Agency Comment.** VDACS did not respond to DEQ's request for comments.

**12. Geologic Resources.** The EIR (page 4-9) does not identify significant geologic resources on the project site.

**12(a) Agency Jurisdiction.** The Virginia Department of Mines, Minerals and Energy (DMME), through its six divisions, regulates the mineral industry, provides mineral research and offers advice on wise use of resources. The Department's mission is to enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner in order to support a more productive economy in Virginia.

**12(b) Agency Comment.** The DMME did not respond to DEQ's request for comments.

**13. Energy Conservation.** The proposed facilities should be planned and designed to comply with state and federal guidelines and industry standards for energy conservation and efficiency, as applicable. In accordance with the Governor's Executive Order No. 19, dated July 1, 2010, Conservation and Efficiency in the Operation of State Government, state-owned facilities over 5,000 square feet in size...shall be designed and constructed consistent with the energy performance standards at least as stringent as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system (including the use of Virginia forest products with alternate certification) or the U.S. Environmental Protection Agency/Department of Energy's "Energy Star" rating. The Department of General Services (DGS) Division of Engineering and Buildings (DEB) encourages state agencies and their architectural and engineering designers to recognize and incorporate the energy, environmental, and sustainability concepts listed in the LEED Green Building Rating System into the development and procurement of their projects.

**13(a) Agency Recommendations.** Agencies of the Commonwealth should review Executive Order 19 (2010) on energy efficiency in state government operations and take appropriate actions to ensure compliance. For example, the energy efficiency of a building can be enhanced by maximizing the use of the following:

- thermally efficient building shell components (roof, wall, floor, windows and insulation);
- facility siting and orientation with consideration towards natural lighting and solar loads;
- high-efficiency heating, ventilation and air conditioning systems;
- high-efficiency lighting systems and day-lighting techniques; and
- energy efficient office and data processing equipment.

Please contact David Spears with the Department of Mines, Minerals and Energy at



(434) 951-6350 for additional information on energy conservation measures. For more information on the LEED rating system, visit [www.leedbuilding.org](http://www.leedbuilding.org).

**14. Pollution Prevention.** DEQ advocates that principles of pollution prevention be used in all construction projects as well as in facility operations. Effective siting, planning and on-site best management practices will help to ensure that environmental impacts are minimized. However, pollution prevention techniques also include decisions related to construction materials, design and operational procedures that will facilitate the reduction of wastes at the source.

**14(a) Agency Recommendations.** We have several pollution prevention recommendations that may be helpful during the construction:

- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider contractors' commitment to the environment when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable materials and practices for infrastructure and building construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things.

The DEQ Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques. If interested, please contact Sharon Baxter at (804) 698-4344.

**15. Pesticides and Herbicides.** In general, when pesticides or herbicides must be used, their use should be strictly in accordance with manufacturers' recommendations. In addition, DEQ recommends that the responsible agent for the project use the least toxic pesticides or herbicides effective in controlling the target species. For more information on pesticide or herbicide use, please contact the Virginia Department of Agriculture and Consumer Services at (804) 786-3501.

**16. Local and Regional Comments.** As customary, DEQ invited Powhatan County and the Richmond Regional Planning District Commission to participate in the Commonwealth's environmental review of this proposal.

**16(a) Local Participation in EIR Review.** Virginia Code § 15.2-2202A requires that the DEQ distribute a copy of the EIR submitted to the Department for every major state

project to the chief administrative officer of every locality in which each project is proposed to be located. The purpose of the distribution is to enable the locality to evaluate the proposed project for environmental impact, consistency with the locality's comprehensive plan, local ordinances adopted pursuant to this chapter, and other applicable laws and to provide the locality with an opportunity to comment. DEQ is required to distribute the reports to localities, solicit their comments and consider their responses in substantially the same manner as DEQ solicits and receives comments from state agencies.

**16(b) Local and DSP Coordination.** In Powhatan County's March 26, 2010, comments, the County states that it believes that coordination with DOC and DSP regarding the proposed project has been inadequate. The County requested additional information and a meeting with DSP.

After receiving comments from Powhatan County, DEQ asked DSP, VDOT, DHR and VDACS to address the concerns raised in the County's comments. Transportation, historic and agricultural issues are addressed in items 10, 8 and 11, respectively. DSP responded (email, R. Rice/C. Tucker, March 30, 2010) directly to Powhatan County, stating that it is reviewing the County's comments and obtaining the requested information.

On May 3, 2010, DSP wrote a letter to Powhatan County regarding a meeting it had with Mr. Carson Tucker, Member of the Powhatan County Board of Supervisors, and the County's planner on April 16, 2010. DSP's letter (attached) addresses potential traffic impacts (item 10), exterior lighting concerns (item 16(b)i) and noise levels (item 16(b)ii). After the June 8, 2010, public meeting, DSP responded to Powhatan County's concerns (letter, R.Rice/J.Wellman, June 28, 2010; email, R.Rice/J.Wellman, July 1, 2010). DEQ distributed this information to the County and appropriate state reviewing agencies. The letter and email address noise abatement measures (item 16(b)ii), noise and sound measurements (item 16(b)ii), errant ammunition rounds (item 16(b)iii), traffic (item 10), effects to Shiloh Baptist Church and other historic resources (item 8), and alternatives (16(b)iv). Powhatan County responded via emails on July 25 and July 27 (items 16(b)i - iv). The County states (email, D.Livick/R.Rice/J.Wellman, July 25, 2010; see email attached for details) that the following groups are opposed to the proposed project:

- Powhatan County, through a unanimous vote of its Board of Supervisors
- Goochland Country, through a unanimous vote of its Board of Supervisors
- Powhatan Farm Bureau
- Powhatan County Historical Society
- Congregation of Shiloh Baptist Church

- Friends of the Scenic Byways
- Michaux-St. James Foundation, Inc.
- Residents of Old River Trail
- Homeowners of Aston
- Homeowners of River Bluffs (Goochland)
- Homebuilders of Aston, Oakleigh and Taurman Park

The County indicates (July 25 attachment to July 27 email, D.Livick/R.Rice/J.Wellman) that the proposed location is the wrong site for a firing range. Public safety, noise, disruption of a Scenic Byway, and degradation of property values are among its objections. The County also questions the consultant's due diligence and comprehensiveness, and indicates that objections to the proposed project have not been properly considered by DSP as evidenced in DSP's responses.

The County also informed DEQ that additional information would be forthcoming from an attorney. On July 28, 2010, Mr. Brian Buniva with Eckert Seamans submitted a letter and a report from Balzer and Associates on behalf of two Powhatan County citizens. DSP has no additional comments on Mr. Buniva's letter or the Balzer report.

*(i) Lighting.*

**a. Local Comments.** Powhatan County states (email, C.Tucker/R.Rice/J.Wellman, March 26, 2010) that the County has a dark-sky ordinance and poses several questions about the lighting plan for the facility. The County states (July 25 attachment to July 27 email, D.Livick/R.Rice/J.Wellman) that there is no guarantee that lights will be turned off at the proposed facility.

**b. DSP Comment.** DSP states (letter, R.Rice/C.Tucker, May 3, 2010) that the light fixtures will not be operated as dusk-to-dawn fixtures and will be controlled by electrical switch devices. The fixtures will only be used when the range is in use at night and when this happens, range activities will be over by 9 p.m. The fixtures are in full compliance with Powhatan County Zoning Ordinance 27A and meet the County's night sky criteria.

*(ii) Sound and Noise Concerns.*

**a. Local Comments.** Powhatan County indicates (email, C.Tucker/R.Rice/J.Wellman, March 26, 2010) that it is concerned about sound abatement measures. The County also states (July 25 attachment to July 27 email, D.Livick/R.Rice/J.Wellman) that it is surprised that DSP has not conducted a comprehensive noise study, given the close proximity to homes and Shiloh

Baptist Church. Powhatan County states that DSP has indicated that Shiloh Baptist Church will notify the range officer of planned activities, and the range officer will suspend firing for the duration of such activities. The County states that this is an admission that there is a problem. According to the County, Shiloh Baptist Church is twice as far from the proposed range as multiple private homes.

Powhatan County has indicated that it endorses a July 28, 2010, letter from Brian L. Buniva of Eckert Seamans and a July 27, 2010, report from Balzer and Associates that were submitted on behalf of two residents. The report considers the possible effects of development on personal safety and disturbance of the peace in relation to the proposed firing range. The report states that the design of the firing range is only minimally effective at reducing the noise that will be created, if at all. Mr. Buniva's letter includes an attachment of the Powhatan County noise ordinance (attached, Section 42-32 of the Code of Powhatan County, as amended).

**b. DSP Comment.** DSP states (letter, R.Rice/C.Tucker, May 3, 2010) that DSP has incorporated all sound control measures that are currently in use at public safety training ranges. DSP will plant evergreens on top of all the berms as requested by the County. The range will be in use during normal business hours (8 a.m. to 5 p.m.). There will be limited nighttime use and all use of the range at night will end by 9 p.m., if not before. According to DSP, range activities will never be conducted on Sundays. Quantitative sound level predictions are not currently available.

In its June 28 comments, DSP states that it has created 15 feet and 20 feet minimum earthen berms with additional evergreen plantings on top to reduce the noise impact. According to DSP, this is the industry standard used by safety agencies. In addition, DSP has placed several restrictions on the scheduled use of the range.

DSP states that it has taken sound measurements with all of the weapons proposed to be used at the range. The measurements (taken in Goochland County) were taken at the point of the shooter and at 2,400 feet away (see attachment for details and the Eckert Seamans letter with the Balzer report for additional sound and noise information.) Regarding the accuracy of the 2,400 foot distance between the proposed point of a shooter and the nearest residence, DSP states (email, R.Rice/ J.Wellman, July 19, 2010) that an on-site field measurement was conducted, and the measurement did not originate from a map or other printed material.

*(iii) Safety.*

**a. Local Comments.** In the County's initial comments (email, C.Tucker/R.Rice/J.Wellman, March 26, 2010), the County states that it appreciates that no firearms or ammunition will be stored on site. However, the proposed facility would be far enough from existing DOC facilities that the County is concerned that even without ammunition, the facility would tempt vandals. The County suggests that DSP post signs on the buildings indicating that no ammunition is stored on site and use a secure farm road access gate on Old River Trail.

Powhatan County states (July 25 attachment to July 27 email, D.Livick/R.Rice/J.Wellman) that public safety is a major concern. Regarding errant rounds or ammunition that may not land on the property of the firing range, Powhatan County states that the area across the river is private property with multiple homes. According to the County, the James River Correctional Center land in Goochland County is more than a mile downstream, indicating that errant rounds would not land on DOC property in Goochland. In addition, Powhatan County states that engineers have been hired to map and project errant rounds or overshots, and that the EIR does not satisfactorily address this issue. Powhatan County has indicated that it endorses a July 28, 2010, letter from Brian L. Buniva of Eckert Seamans and a July 27, 2010, report from Balzer and Associates that were submitted on behalf of two residents. Regarding public safety, the report states that it would take a 0.30-degree margin of error in the scope calibration of the shooter's accuracy for a bullet to potentially clear the berm behind the target area.

**b. DSP Comments.** DSP states (letter, R.Rice/J.Wellman, June 28, 2010) that all gun firing will occur toward the James River with a lead collection backstop system in place. In addition, the 20-foot-high berm to the rear of all range targets will provide additional protection. According to DSP, the rifle range system target backstop would be approximately 10,000 feet away from areas of risk, and DSP believes that the chance that an errant round will hit any area of risk is very remote.

*iv. Alternatives.*

**a. Local Comments.** Powhatan County (July 25 attachment to July 27 email, D.Livick/R.Rice/J.Wellman) states that it objects DSP's analysis of alternatives.

**b. DSP Comments.** DSP states (email, R.Rice/J.Wellman, June 1, 2010) that in

the Richmond region, it is currently using a shared range at Camp 13 in Chesterfield County and a shared range at DOC property in Goochland County. Because of the current use of these ranges by all parties involved, DSP cannot accomplish all of the required training in an efficient and timely manner. Also, according to DSP, the range in Chesterfield County does not have an efficient lead collection system.

DSP states (email, R.Rice/J.Wellman, July 1, 2010) that an offer was made by Brunswick County to relocate the range to its County. According to DSP, the location is not conducive to the personnel who would use the facility. Almost all of the training will be by personnel who are assigned permanently or temporarily (training academy students) in the Richmond area. According to DSP, too much time would be lost in travel to and from the facility to make it a practical site. DSP states that the Fort Picket site is closer, but not as practical, as the Powhatan site. DSP also states since the FBI is providing the most significant amount of funding, the FBI had certain distance restrictions on how far the facility could be from its Richmond office.

Detailed comments are attached for consideration.

**16(c) Recommendations.** Coordinate with Powhatan County (Mr. Carson Tucker, District 5 Representative, Board of Supervisors, at 804-598 2213 and Carolyn Bishop, Powhatan County Administrator, at 804-598-5612) regarding local ordinances and concerns. Also, coordinate with Goochland County (Rebecca Dickson, Goochland County Administrator, at 804-556-5811) regarding local concerns.

**16(d) Regional Planning Impacts.** In accordance with the Code of Virginia, Section 15.2-4207, planning district commissions encourage and facilitate local government cooperation and state-local cooperation in addressing, on a regional basis, problems of greater than local significance. The cooperation resulting from this is intended to facilitate the recognition and analysis of regional opportunities and take account of regional influences in planning and implementing public policies and services. Planning district commissions promote the orderly and efficient development of the physical, social and economic elements of the districts by planning, and encouraging and assisting localities to plan, for the future.

**16(e) Regional Comments.** The Richmond Regional Planning District Commission (RRPDC) states that it did not receive comments from locality staff on this project. The RRPDC reviewed the proposed project and has no comment on the project as proposed.

## REGULATORY AND COORDINATION NEEDS

### 1. Erosion and Sediment Control.

**1(a) Erosion and Sediment Control Plan.** DSP must receive approval for the project-specific erosion and sediment control (ESC) plan prior to initiation of any land-disturbing activity at the project site. Virginia Code 10.1-564 stipulates that state ESC plans for projects on state-owned lands must be consistent with local ESC requirements that are more stringent than the state program. DSP should coordinate with the DCR DSWC Richmond Regional Office at (804) 225-4468 regarding applicable requirements. (Reference: VESCL §10.1-560, §10.1-564; VESCR § 4VAC50-30-30, §4VAC50-30-40, § 4VAC50-30-100).

**1(b) Stormwater Management Plan.** A project-specific stormwater management plan must be reviewed and approved by the DCR DSWC for state agency projects that involve a land use conversion activity of 1 acre or more. An approved plan is required prior to initiation of any regulated activities at the project site (Reference: VSMA §10.1-603.5.; VSMP Permit Regulations §4VAC50-60-160). Questions should be directed to the DCR DSWC Richmond Regional Office at (804) 225-4468.

**1(c) VSMP Regulation.** For projects involving land-disturbing activities of equal to or greater than 1 acre, DSP is required to apply for registration coverage under the Virginia Stormwater Management Program (VSMP) General Permit for Discharges of Stormwater from Construction Activities. In accordance with 4VAC50-60-160 B, state projects must comply with the state regulation and, to the maximum extent practicable, with any local stormwater management program technical requirements adopted pursuant to the Virginia Stormwater Management Act. It is the responsibility of the state agency to demonstrate that the local program technical requirements are not practical for the project under consideration. DSP must also develop a project-specific stormwater pollution prevention plan (SWPPP). Specific questions regarding the Stormwater Management Program requirements should be directed to Holly Sepety with DCR at (804) 225-2613 (Reference: Virginia Stormwater Management Act §10.1-603.1 *et seq.*; VSMP §4VAC50-60 *et seq.*).

**2. Air Quality Regulations.** According to the DEQ Air Division, the following regulations may apply:

- 9VAC5-50-60 *et seq.* of the regulations governing fugitive dust.
- 9VAC5-130 *et seq.* of the regulations governing open burning.

Contact officials with Powhatan County (804-598-5611) for information on local

requirements pertaining to open burning, if applicable.

**2(a) Permitting Determination.** Contact James Kyle with DEQ PRO at (804) 527-5047 prior to construction for a permitting determination if fuel-burning and/or other air-pollution-emitting equipment will be used.

**3. Solid Waste and Hazardous Substances.** All solid waste, hazardous waste and hazardous materials must be managed in accordance with all applicable federal, state and local environmental regulations.

Applicable state regulations include:

- Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*;
- Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC20-60);
- Virginia Solid Waste Management Regulations (VSWMR) (9VAC20-80); and
- Virginia Regulations for the Transportation of Hazardous Materials (9VAC20-110).

Applicable federal regulations are:

- the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and
- the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Parts 107, 171.1-172.558.

Contact Kyle Winter with DEQ PRO at (804)527-5052 for additional information.

#### **4. Natural Heritage Resources.**

- Contact the DCR DNH (804-371-2708) for an update on natural heritage information if a significant amount of time passes before it is utilized.
- Coordinate with the U.S. FWS (804-693-6694) and DGIF (Amy Ewing at 804-367-2211) to ensure compliance with protected species legislation due to the legal status of the Brook floater, the Atlantic pigtoe and the James Spiny mussel.

**5. Wildlife Resources.** If instream work becomes necessary, coordinate with DGIF (Amy Ewing at 804-367-2211 or [Amy.Ewing@dgif.virginia.gov](mailto:Amy.Ewing@dgif.virginia.gov)) to ensure protection of listed wildlife resources under its jurisdiction.

#### **6. Historic Resources.**

- Coordinate with DHR (Roger Kirchen at [Roger.Kirchen@dhr.virginia.gov](mailto:Roger.Kirchen@dhr.virginia.gov)) and Powhatan County (804-598-5611) regarding the historic resources survey



results.

- Obtain a permit from DHR prior to any archaeological study.
- Provide results of the archaeological and architectural surveys to DHR for review and comment prior to beginning this project. Contact Roger Kirchen with DHR at *Roger.Kirchen@dhr.virginia.gov* for submission information.
- If this project includes federal involvement, contact DHR (Roger Kirchen at 804-367-2323, ext. 153. or *Roger.Kirchen@dhr.virginia.gov*) to ensure compliance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR 800, as applicable.

## **7. Waterworks Operation Regulations and Sewerage Regulations.**

- Installation of new water lines and appurtenances must comply with the Commonwealth's waterworks regulations and all applicable standards of the locality. Contact Powhatan County (804-598-5611) to ensure compliance.
- Notify DOC's James River Correctional Center Water Treatment Plant (Herbert Lee Puett at 804-784-3551, ext. 2298) regarding the scope of this project.
- Contact the local VDH district (804) 598-5680 to ensure compliance with sewerage regulations. VDH has authority for non-discharging systems such as septic tanks and drain fields. This authority is contained in the Sewage Handling and Disposal Regulations (12VAC5-610-10 *et seq.*).

**8. Local Concerns.** Coordinate with Powhatan County (Mr. Carson Tucker, District 5 Representative, Board of Supervisors, at 804-598 2213 and Carolyn Bishop, Powhatan County Administrator, at 804-598-5612) concerning local ordinances and concerns. Also, coordinate with Goochland County (Rebecca Dickson, Goochland County Administrator, at 804-556-5811) regarding local concerns.

**9. Additional EIR Review.** If the proposed project changes subsequent to this EIR review, DEQ must be notified. DEQ will determine if the change affects the addressed environmental impacts, thereby requiring further review. The EIR Procedure Manual is available at [www.deq.virginia.gov/eir/stateimpact.html](http://www.deq.virginia.gov/eir/stateimpact.html).